

REMARKS

Claims 10-26 are pending. By this Amendment, claims 10, 19, and 20 are amended. No new matter is introduced by the amendments.

In view of the following comments, Applicants respectfully request favorable consideration and allowance of the claims.

Rejection under 35 U.S.C. § 103(a) over Oleskevich, Tanuma, and Ohishi

Claims 10-15, 17-20, 22-23, and 25-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,790,735 to Oleskevich et al. ("Oleskevich") in view of U.S. Patent No. 5,402,438 to Tanuma ("Tanuma") and U.S. Patent No. 6,373,863 to Ohishi et al. ("Ohishi"). Applicants respectfully request reconsideration of the rejection.

A *prima facie* case of obviousness of Applicants' claimed invention has not been established, as the cited references, individually or in combination, do not teach or suggest all of the features included in independent claims 10, 19, or 20. Specifically, the cited references do not teach or suggest mode mixing in an active core of a fibre, as included in the claims. The Examiner cites Oleskevich as teaching a multi-mode fibre laser in which mode mixing occurs in the fibre resonator. However, it is respectfully noted that Oleskevich only teaches a fibre having a single-mode core and, therefore, lasing in single mode only in the core. Tanuma and Ohishi do not make up for this deficiency.

Furthermore, while the Examiner cites Tanuma as teaching the use of end mirrors to couple out predominantly low transverse order beams, there would be no reason to configure the end mirrors of a fibre laser of Oleskevich to couple out lower-mode radiation, as there is no other

lower or higher mode in the fibre core. Oleskevich teaches only single-mode lasing in the core and explicitly teaches away from having multi-mode radiation within the fibre core.

Thus, a *prima facie* case of obviousness of Applicants' claimed invention has not been established. With respect to specific features of the claims depending from independent claims 10, 19, and 20, these are not commented on further, as they are presently moot given the above analysis, although Applicants do not acquiesce in the Examiner's position. As such, Applicants respectfully request withdrawal of the rejection of claims 10-15, 17-20, 22-23, and 25-26.

Rejection under 35 U.S.C. § 103(a) over Oleskevich, Tanuma, Ohishi, and Waarts

Claims 16 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanuma in view of U.S. Patent No. 4,995,050 to Waarts et al. ("Waarts"). Waarts does not make up for the deficiencies of Oleskevich, Tanuma, and Ohishi discussed above with respect to claims 10 and 20, from which claims 16 and 24 depend, respectively. Thus, a *prima facie* of obviousness has not been established. Applicants respectfully request withdrawal of the rejection of claims 16 and 24.

Rejection under 35 U.S.C. § 103(a) over Oleskevich, Tanuma, Ohishi, and Shaw

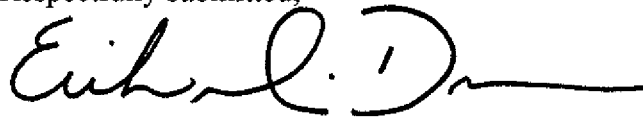
Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Oleskevich in view of Tanuma and Ohishi and further in view of U.S. Patent No. 4,634,282 to Shaw ("Shaw"). Shaw does not make up for the deficiencies of Oleskevich, Tanuma, and Ohishi discussed above with respect to claim 20, from which claims 21 depends. Thus, a *prima facie* of obviousness has not been established. Applicants respectfully request withdrawal of the rejection of claim 21.

Conclusion

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Erik M. Drange". The signature is fluid and cursive, with a large initial "E" and a long horizontal stroke at the end.

Erik M. Drange  
Registration No. 57,750

Customer No. 24113  
Patterson, Thuent, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 252-1538